Utilizing Comparative Effectiveness Research in the VHA and DOD for Immediate Treatment of Acute Back Injury with Active Duty Troops and Qualified Veterans

Background:

The United States Department of Defense (DOD) Medical Command and Veteran's Health Administration (VHA) can utilize new evidence based effective treatment methods for acute injuries to the mid and lower spinal cord, (specifically injuries involving disc herniation and misalignment). One approach to this is through comparative effectiveness research. "The purpose of comparative effectiveness research is to assist consumers, clinicians, purchasers, and policy makers to make informed decisions that will improve health care at both the individual and population levels" (IOM, 2009).

Current treatment methods involve expensive and sometimes, multiple surgical procedures that may show ineffective long term success rates (Kirkaldy-Willis, 1999). Furthermore, most injuries to the back occur in the field and the standard treatment protocol requires the patient to be evacuated to a medical facility for treatment to begin (Kirkaldy-Willis, 1999). Providers that are following outdated standard care models are not maximizing the health of our troops. Our alternative treatment option is the R-6 Portable Spinal Treatment System based on research by Dr. Charles Burton, M.D. the former Chairman of the U.S. Food & Drug Administration's (FDA) Advisory Panel on Neurological Devices. The R-6 treatment system was invented by Dr. Ivan L. Robinson DNP, FNP-BC, a Decorated and Service Disabled Armed Forces Veteran. The R-6 treatment system stabilizes spinal disc injuries alleviating pain at the time of injury in the field. After evacuation to medical facility and a disc injury confirmed, patients can continue utilization of the system through recovery at no additional cost of equipment.

Below are some medical benefits and cost saving associated with this innovative treatment method. Immediate evaluation by the Comparative Effectiveness Research board of both the VHA and DOD is recommended to optimize the health of our spinal injured troops.

Key Points:

- Troops and Veteran's with spinal disc injuries need & deserve immediate on site treatment.
- All Surgery Carries Risk (Kirkaldy-Willis, 1999)
- Reduced the need for surgery in 76% of surgical candidates (Kirkaldy-Willis, 1999)
- Direct costs of Surgery \$10,311(Hansson and Hansson, 2007)+Indirect cost \$30,000 or more(Rush, 2008) vs \$1,850 (R-6, 2014)
- Even when there is no need for additional surgery after initial surgery, the cost of care is still higher than in non-surgical treatment (Hannsson, 2006)

Recommendations:

- Comparative Effectiveness Research Utilization and implementation.
- Utilization of existing secure web based tele-health consults when needed for troops in field.
- Education of Provider treatment options.
- Foster Public-Private partnerships for delivery of follow-up care.

Reference

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